



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,842	03/26/2001	Robert F. Gazdzinski	RFG.006CP1	9452
27299	7590	01/12/2006	EXAMINER	
GAZDZINSKI & ASSOCIATES 11440 WEST BERNARDO COURT, SUITE 375 SAN DIEGO, CA 92127			LEUBECKER, JOHN P	
			ART UNIT	PAPER NUMBER
			3739	
DATE MAILED: 01/12/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,842

Applicant(s)

GAZDZINSKI, ROBERT F.

Examiner

John P. Leubecker

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-26, 34-41 and 46-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-26, 34-41 and 46-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/13/02</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on June 22, 2005 is acknowledged.

Drawings

2. The drawings were received on August 15, 2001. These drawings are acceptable.

Claim Objections

3. Claims 17 and 18 are objected to because of the following informalities: as to claim 17 and 18, "at least processor core" should be --processor core--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 16, 20, 28, 36, 39, 46, 50, 52 and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 16, the terms "optimized" and "reduced" are based on no readily recognizable reference or standard, making the scope of the claim unclear. It is thus impossible to determine whether the claimed "processor core" distinguishes itself from any other known processor core.

As to claim 20, "said core" lacks antecedent basis.

As to claim 38, the term “optimized” is based on no readily recognizable reference or standard, making the scope of the claim unclear.

As to claim 39, the step of “adapted to optimize the processing” is a relative phrase based on no readily recognizable reference or standard, making the scope of the claim unclear.

As to claim 36, the term “unique” makes the scope of the claim unclear since it is unclear what makes a spreading code “unique” and how such a “unique” spreading code is different from any spreading code.

As to claim 46, the term “optimized” is based on no readily recognizable reference or standard, making the scope of the claim unclear.

As to claim 50, the term “optimized” is based on no readily recognizable reference or standard, making the scope of the claim unclear.

As to claim 52, the phrase “which optimizes the power” is a relative phrase based on no readily recognizable reference or standard, making the scope of the claim unclear.

As to claim 53, the phrase “with a reduced number of processor cycles” is a relative phrase based on no readily recognizable reference or standard, making the scope of the claim unclear.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 15-20, 23, 35, 38-41, 46, 48 and 50-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Brune (U.S. Pat. 5,984,875).

Brune disclose a probe including at least one sensor capable of collecting information (col.5, lines 19-27), a data processor (col.6, lines 18-31 and col.7, lines 13-14) and a communications device (col.7, lines 39-60). As to claim 15, circuit board (23, col.8, lines 64-67) meets the limitation of a single conductive die. As to claim 16, the data processor inherently includes a core which has a certain power consumption which is “reduced” compared to what it could be and thus optimized (any design for size or power consumption is its own optimal design by nature of being the preferred or chosen design). As to claims 17-19, note col.6, lines 32-42 and col.7, lines 13-38. As to claim 20, any microprocessor will inherently include an instruction that performs a mathematical operation. However, with respect to claim 23, note col.7, lines 32-36. As to claim 35, use of a small frequency range and FSK techniques will minimize certain interference with other device (e.g., devices using different frequency ranges). Claims 39, 40, 52 and 53 are product by process claims and are only bound by the structure of the product they imply. The structure mentioned above meet the structural limitations of claims 39, 40, 52 and 53.

8. Claims 15, 16, 20, 35, 38, 39, 46 and 50-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Alfano et al. (U.S. Pat. 6,240,312).

Alfano et al. disclose a probe including at least one sensor (25), a data processor (29), and a communications device (21). Although shown schematically, at least one single semiconductive die or substrate will inherently be incorporated by one or both of the data processor or communications device (e.g., note col.6, lines 1-2). The data processor inherently includes a core which has a certain power consumption which is “reduced” compared to what it could be and thus optimized (any design for size or power consumption is its own optimal design by nature of being the preferred or chosen design). The data processor also inherently includes a instruction and mathematical operation.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 21, 22 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brune in view of Kratz et al. (U.S. Pat. 4,041,461).

Brune disclose a device as described above which includes a digital data processor but fails to disclose that the processor includes a FFT operation or a butterfly calculation. The Examiner takes the position that digital signal processing for storage and/or transfer commonly uses a FFT operation, and additionally, that butterfly calculations are commonly used in software based FFT calculations. Kratz et al. is just one example of a generic digital data processor which

teaches the conventional use of FFT operations (e.g., col.1, lines5-21), including the FFT butterfly (col.76, lines 39+). Since the Brune device is processing and transferring digital data, it would have been obvious to one of ordinary skill in the art to have programmed the processor with what is known or what is used for this particular purpose, including the FFT butterfly operation.

11. Claims 24, 25, 34, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Souissi et al. (U.S. Pat. 5,671,247).

Brune discloses a medical device as described above including a conventional RF transmission using conventional FSK or BPSK techniques in the 27 MHz frequency range. It would be obvious to one of ordinary skill in the art to have used a known alternative frequency band, and particularly a free, unlicensed band designated for medical purposes. The ISM bands are one such set of bands. Furthermore, these bands require spread spectrum techniques (note col.2, lines 13-26) which are particularly well suited for FSK and BPSK transmission techniques, among others. Spread spectrum techniques consists of two schemes: DSSS and FHSS (col.1, lines 31-38). It would have been obvious to one of ordinary skill in the art to have used any known communication technique for the inherent advantages associated with such technique as an obvious alternative to the communication technique of Brune.

12. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brune in view of Roberts et al. (U.S. Pat. 6,636,566) or the PulsON article (note item 60 in Applicant's IDS).

Brune discloses a device as described above that wirelessly communicates data. Roberts et al. and the PulsON article both teach use of the TM-UWB technology as being particularly suited for wireless communications for a multitude of reasons (e.g., increased bandwidth, reduced interference, etc.) (note at least col.1, lines 15-32 of Roberts et al. and page 2 of the PulsON article). Because TM-UWB provides an alternative wireless communication technique with many desirable advantages that would be consistent with the application of the Brune device, it would have been obvious to one of ordinary skill in the art to have used such communication technique.

13. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brune in view of Fette et al. (U.S. Pat. 4,862,407).

Brune discloses the device as described above but fails to disclose the particulars of the signal processing algorithms, such as the use of MAC operations. MAC operations are typically associated with digital signal processors and frequently associated with FFT operations. Fette et al. teaches that MAC operations are an “essential, frequently utilized function within most DSP systems” (col.1, lines 20-22). If not inherent, it would have been obvious to one of ordinary skill in the art to have used MAC operations for processing the signals in the Brune device for the inherent advantages associated with the existence of such operations.

14. Claims 49 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alfano et al. in view of Seiko Epson Corp (JP 2-82889).

Alfano et al. discloses RF transmission of the image signal (col.5, lines 66-12) but fails to disclose a compression technique (which would clearly be accommodated by the processor).

However, Seiko Epson Corp. teaches compressing a video signal before transmission. It would have been obvious to one of ordinary skill to have modified the Alfano et al. device to use such compression technique in order to gain the well known advantages of such technique.

15. Other analogous rejections under 35 USC 103(a) over Alfano et al. in view of certain references used in relation to the Brune reference could be made on certain claims concerning the application of known technology. However, since these claims have been rejected and the Examiner is only given a limited amount of time, no matter how overly broad the claims, they will not be made until necessary, or until what is considered the invention is made clear to the Examiner.

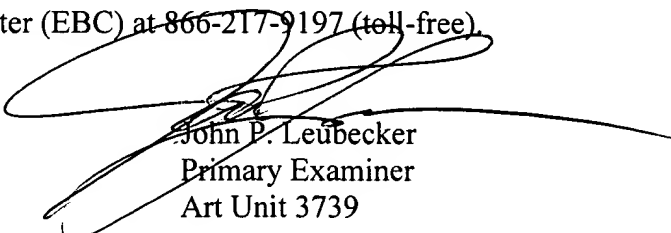
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P. Leubecker
Primary Examiner
Art Unit 3739

jpl